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PRACTICE COMPARISONS BETWEEN JAPAN AND THE UNITED STATES - EARLY RESULTS WITH JAPANESE PERCUTANEOUS CORONARY INTERVENTION REGISTRY AND ITS DIRECT COMPARISON WITH THE NCDR® CATH/PCI REGISTRY

ACC Moderated Poster Contributions
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Background: Little is known about the presentation and in-hospital outcomes of Japanese PCI patients compared with patients in the US in the contemporary era.

Methods: The Japan Cardiovascular Database (JCD-PCI) was launched in September 2008. Clinical variables and in-hospital outcomes for JCD-PCI were defined in accordance with those specified for CathPCI Registry® v4.1, which was designed to enable direct comparison of these two large-scale datasets. In the present analysis, JCD-PCI data [N=3802; 2008-2011] were compared with CathPCI Registry data [N=732,345; 2008-2010] excluding patients who experienced cardiac arrest within 24 hours.

Results: The demographic information is shown in Table. Overall, PCI was performed on elective, urgent and emergency basis for 55.6, 21.6 and 22.1% in JCD-PCI, and 46.4, 37.4 and 15.9% in the ACC-NCDR, respectively. Chronic total obstruction (5.9 vs 3.1%, $P<0.001$), or bifurcation lesions (22.1 vs 12.7%, $P<0.001$) were seen more frequently in patients in JCD-PCI compared with ACC-NCDR. Unadjusted mortality (1.7 vs. 0.9%, $P<0.001$) and bleeding complication rate within 72 hours (4.1 vs. 1.8%, $P<0.001$) were also higher in the JCD-PCI.

Conclusions: The clinical and procedural characteristic of patients undergoing PCI in Japan and the US differ substantially with higher crude in-hospital mortality and complication rates in patients from Japan, likely due to the differences in procedural features. Further comparisons may inform the practice of PCI in both countries.

Demographical information from the two registries.

	Japan	US	P-value
Age, years	67.5±10.8	64.6±12.1	<0.001
Female gender, %	20.6	32.8	<0.001
Body mass index, kg/m ²	24.5±16.1	29.9±6.4	<0.001
Hypertension, %	81.8	72.1	<0.001
Insulin-dependent diabetes, %	9.5	12.7	<0.001
Previous myocardial infarction, %	24.4	29.6	<0.001
Previous heart failure, %	7.5	11.3	<0.001
Cerebrovascular disease, %	8.0	12.1	<0.001
Presentation with cardiogenic shock, %	2.4	1.1	<0.001